

REMARKS

Claims 28-36 are all the claims pending in the application. Claims 28-36 presently stand rejected.

Claim 34 is objected to because of a minor informality. Applicant has amended the claim as suggested and respectfully requests that the Examiner withdraw the objection.

Claim Rejections Under 35 U.S.C. § 102 and §103

Claims 28, 29, 32 and 33 are rejected under 35 U.S.C. § 102(b) as being anticipated by Dragone et al. (5,926,586). Claims 30 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dragone et al. (5,926,586) in view of Distefano et al. (5,776,796). Claims 34 and 35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dragone et al. (5,926,586) in view of Reinker (5,745,631). Claim 36 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Dragone et al. (5,926,586) in view of Reinker (5,745,631) and further in view of Forbes et al. (6,379,909).

Claims 28, 29, 32, and 33

With respect to independent claim 28, Applicant respectfully requests that the Examiner withdraw this rejection at least because Dragone does not teach all of the claims's recitations. For example, Dragone does not teach the claimed method in which the concave boundary line of one chip of said plurality of chips is shaped *the same as* the convex boundary line of another chip of said plurality of chips that adjoined said one chip on said wafer.

Instead, Dragone only discloses "cutting along curved lines that follow the contours of the shape of the routers (i.e., the curved boundaries [shown in FIG. 5]) rather than along straight

dicing lines as in the prior art of FIG. 2.” This reduces “the chances of crack and fissure propagation.” *See* Dragone at 4:4-13. Therefore, even if the cuttings along Dragone’s curved boundary lines follows the contours of the shape of the routers, there is no disclosure that the concave boundary line of the upper chip and the convex boundary line of the lower chip are *the same shape*.

Moreover, the Examiner asserts that “it apparent that the same cut forms the concave boundary of the upper chip and the convex boundary of the lower chip in Figure 5.” However, the Examiner’s assertion appears to be based on a misapplication or misunderstanding of Dragone’s disclosure.

Although the Examiner asserts that columns 3-5 of Dragone discloses that “the two lowest chips in Fig. 5 are separated by a single dicing line arranged between the router elements and generally following the contour of the lower element and the lower concave curve of the upper element,” Dragone does not disclose any embodiment in which only a *single* dicing line is used between two optical elements. Instead, Dragone merely discloses cutting along the “curved boundaries,” for which *two* are provided between each of the elements. *See* Dragone at FIG. 5.

Although Dragone at 3:30-35 discloses that the invention “enables the manufacture of non-rectangular optical devices in which *one or more* of the cuts made during the manufacturing process are non-linear or curved” (emphasis added), this disclosure does not mean that there is any embodiment in which there is a *single* curved dicing line that is the only separation between two optical elements. Instead, this disclosure seems to apply to embodiments in which “*at least one* of the sides of the device is cut along a non-straight or curved line” (emphasis added). *See*

Dragone at 3:57-61. That is, it is possible in Dragone's embodiments for only one of the sides of the device to be a curved line, while the other side is a straight line.

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of independent claim 28. In addition, Applicant respectfully requests that the Examiner withdraw the rejection of dependent claims 29, 32, and 33 at least because of their dependency from claim 28.

Claims 30 and 31

Applicant also respectfully requests that the Examiner withdraw the rejection of dependent claims 30 and 31 at least because of their dependency from claim 28 and because Distefano, which was cited by the Examiner as showing a ultrasonic vibration or hydraulic pressure for cutting chips, does not cure the deficiencies in Dragone discussed above.

Claim 34 and 35

In addition, with respect to independent claim 34, Applicant respectfully requests that the Examiner at least because there is no combination of Dragone and Reinker that would reasonably teach or suggest the claimed method in which the concave boundary line of one chip of said plurality of chips is shaped *the same* as the convex boundary line of another chip of said plurality of chips that adjoined said one chip on said wafer.

Dragone does not teach or suggest this feature, as is discussed above with respect to independent claim 28. Moreover, Reinker, which was cited by the Examiner as showing an optical multiplexer formed by stacking chips and flowing adhesive, does not cure the deficiencies in Dragone discussed above.

AMENDMENT UNDER 37 C.F.R. § 1.116
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Claim 36


Applicant respectfully requests that the Examiner withdraw the rejection of dependent claim 36 at least because of their dependency from claim 34 and because Forbes, which was cited by the Examiner as showing a stacked chip structure in which chips can be cut from the same wafer or different wafers, does not cure the deficiencies in Dragone discussed above.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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